



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/784,804

02/24/2004

Takuya Hara

X2007.0151

9748

32172

7590

08/02/2006

DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP
1177 AVENUE OF THE AMERICAS (6TH AVENUE)
41 ST FL.
NEW YORK, NY 10036-2714

EXAMINER

RODRIGUEZ, JOSEPH C

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/784,804	HARA ET AL.	
	Examiner	Art Unit	
	Joseph C. Rodriguez	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Final Rejection

Applicant's arguments filed 6/1/06 have been fully considered but they are not persuasive for reasons detailed below.

The 35 U.S.C. 112 rejections are maintained or modified as follows:

These rejections have been withdrawn.

The prior art rejections are maintained or modified as follows:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Liu et al. ("Liu")(US 6,294,747).

Regarding claims 1, 6, 8, 21, Liu teaches a work screening apparatus (Fig. 1-16) comprising:

a slope way (chute 29) for sequentially transporting a plurality of works;

a first transport unit equipped with a plurality of work holding spaces (Fig. 4, 6, 7; transfer wheel with a plurality of cavities 23 at prescribed pitches therebetween), so that the plurality of works sequentially transported via the slope way are independently held in the plurality of work holding spaces (Abstract teaching that each cavity holds one work), wherein a leap inhibiting wall (9, 25) is arranged at a prescribed position between

the slope way and the work holding space so as to inhibit each of the works from leaping outside therefrom; and

a discharge unit (Fig. 11, 13; air ejector 101, 125) for automatically discharging the plurality of works transported thereto from the transport unit at a prescribed discharge position in response to inspection results thereof produced by an inspection apparatus (col. 6, ln. 53 – col. 7, ln. 42). Further, Applicant is respectfully reminded that claim language consisting of functional language and/or intended use phrasing is given little, if any, patentable weight as the apparatus must merely be capable of functioning, or being used, as claimed. See MPEP 2112.02, 2114. Here, the device is certainly capable of sequentially transporting works one by one onto a slope for which inspection has been completed by an inspection apparatus and discharging the works based on the results therefrom.

Regarding claims 2, 3, 5, 7, Liu teaches that the plurality of works are sequentially put into the plurality of work holding spaces independently in accordance with rotation of the first transport unit (col. 4, ln. 13-col. 5, ln. 29), which includes

a secondary transport unit (screening table 65) having a planar portion for receiving the plurality of works transported thereto and for further transporting the plurality of works towards the prescribed discharge position (col. 5, ln. 30-col. 6, ln. 19 teaching that transport units are at the same perimeter speed to allow for transfer onto outer periphery of screening table), and

said first transport unit is installed in a hollow of a housing so that each of the work holding spaces is defined between a circumferential wall of the hollow and a

Art Unit: 3653

bottom of the hollow (Fig. 4, 6), and wherein an upper surface of the secondary transport unit is set substantially a same height as the bottom of the hollow, and an opening is formed to partially cut out the circumferential wall of the hollow to communicate with the secondary transport unit, and the opening of the hollow is arranged just above the upper surface of the secondary transport unit (Fig. 8 showing gap between first and second transport units; col. 5, ln. 30-col. 6, ln. 19).

Regarding claim 4, Liu teaches an escape channel (Fig. 8, 10 channel near 91) arranged in the transport unit so as to allow the work to escape towards a downstream side as the transport unit rotates, so that the work that fails to be transported to the secondary transport unit is discharged outside of the transport unit (col. 6, ln. 18-34).

Regarding the method step in claim 10, Liu teaches the transference in bulk of the chips down a vibrating chute and "gently depositing" said chips on the upper surface of the transport wheel prior to transferring the chips to the second transport unit (col. 4, ln. 40-col 6., ln. 18). Thus, it is implicit that a time period in which the plurality of work holding spaces move by one pitch is set shorter than a time interval in which each of the works is transported via the slope way. That is, if the time period was longer than the first transport unit would be overloaded with chips from the vibrating chute.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole

Art Unit: 3653

would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Applicant's Admitted Prior Art.

Liu as set forth above teaches all that is claimed except for expressly teaching said works being completed in inspection prior to transport. Applicant, however, already teaches that it is known to completely inspect works prior to transport to the rotary screening table (Spec., p. 1). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Liu with the completed inspection of the works as Applicant already teaches that this modification is well known.

Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu in view of Applicant's Admitted Prior Art as applied to claims 1-21 above, and further in view of Pratt (US 2002/0056669).

Liu and Applicant's teachings as set forth above teaches all that is claimed except for expressly teaching the process step of sequentially and independently sliding the objects one by one into a work holding space. Further, under an alternative interpretation, Liu may not be regarded as capable of this process step. Pratt, however, teaches a rotary bowl sorter that utilizes a vibrating slope way as claimed (Fig. 2, 3, slope 26 showing sequential transport of objects into hold spaces). Moreover, Pratt teaches that this feeding system provides the precise delivery of electronic devices to holding spaces via the slope way alignment system (para. 31-41). Therefore, it would

have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the invention of Liu and Applicant's teachings with the feeding systems taught by Pratt to ensure the objects are delivered in an aligned and precise fashion.

Response to Arguments

Applicant's arguments that the prior art fails to teach the claimed features are unpersuasive. In particular, Applicant emphasizes that Liu fails to transport the objects sequentially. Here, Applicant is respectfully reminded that claim language is interpreted as broadly as reason allows and that chips transported down a vibrating chute, as taught by the prior art, can be reasonably regarded as transporting chips sequentially as the chips follow each other in a sequential manner. Further, Applicant is respectfully reminded that claim language consisting of functional language and/or intended use phrasing is given little, if any, patentable weight as the apparatus must merely be capable of functioning, or being used, as claimed. See MPEP 2112.02, 2114. Here, the structure taught by Liu is certainly capable of transporting the chips as claimed. Further, the workspaces in Liu can be regarded as indirectly receiving the works from a slope way. Further, Applicant's arguments have been rendered moot by the prior art rejection using Pratt as set forth above. Consequently, the claims stand rejected.

Examiner has maintained the prior art rejections, statutory rejections and drawing objections as previously stated and as modified above. Applicant's amendment

Art Unit: 3653

necessitated any new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Conclusion

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Joseph C Rodriguez** whose telephone number is **571-272-6942** (M-F, 9 am – 6 pm, EST).

The **Official** fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

The examiner's **UNOFFICIAL Personal** fax number is **571-273-6942**.

Further, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only.

For more information about the PAIR system, see

<http://pair-direct.uspto.gov>

Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at **866-217-9197** (Toll Free).

Alternatively, inquiries of a general nature or relating to the status of this application or proceeding can also be directed to the **Receptionist** whose telephone number is **571-272-6584** or to the Supervisory Examiner, Patrick Mackey, **571-272-6916**.

Signed by Examiner Joseph Rodriguez

Jcr

July 28, 2006

A handwritten signature in black ink, appearing to be 'JR' with a stylized flourish, located to the right of the typed name 'Signed by Examiner Joseph Rodriguez'.